

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460 Mail Code 5401G

September 9, 2005

Mr. Allan Patton
State Water Resources Control Board
Division of Financial Assistance
1001 I Street
Sacramento, CA 95814

Dear Mr. Patton:



Thank you for your letter to Bill Lienesch dated October 4, 2004 requesting an interpretation about the regulatory status of underground storage tanks containing liquid asphalt. Specifically, you asked whether cutback asphalts SC 70, MC 70, and SC 800 are considered regulated substances pursuant to 40 CFR Part 280.12. I sincerely apologize for the late response to your letter.

There are various types of liquid asphalt, and whether a particular type qualifies as a regulated substance depends on whether it is liquid at standard temperature and pressure. As I understand it, most neat asphalt cement is solid at standard temperature and pressure. Asphalt cement is usually stored in heated tanks, to liquefy the material so it can flow through pipes or nozzles. Thus, asphalt cement will likely not be considered a regulated substance and an UST storing that asphalt cement will likely not be a regulated UST¹.

Other common means of liquefying asphalt cement are dissolution and emulsification. Dissolution involves dissolving the asphalt cement in volatile petroleum solvents (such as gasoline, kerosene or fuel oil). The resulting mixture, referred to as cutback asphalt, is liquid at standard temperature and pressure. Cutback asphalt, therefore, is a regulated substance under 40 CFR Part 280. SC 70, MC 70, and SC 800 are all different grades of cutback asphalt. Emulsification involves mixing the asphalt cement with water that has been treated with an emulsifying agent, such as soap. The resulting product is referred to as an emulsified asphalt, which is liquid at standard temperature and pressure. Emulsified asphalts are also regulated substances under 40 CFR Part 280, since they are liquid at standard temperature and pressure, and they contain more than a de minimis amount of petroleum product (in this case, asphalt cement).

¹ If a certain type or grade of asphalt cement is liquid at standard temperature and pressure, that particular substance would be a regulated substance under 40 CFR Part 280.

In summary, there are various categories of substances that contain asphalt, each with multiple grades. There are likely other types or grades of asphalt not addressed in this letter. If these substances are liquid at standard temperature and pressure, they would be regulated substances under 40 CFR Part 280. Specific to your initial question, cutback asphalts SC 70, MC 70, and SC 800 are liquid at standard temperature and pressure, and are regulated substances.

For a good explanation of asphalts, cutbacks, emulsions, and their various characteristics, grades, and functions, see: http://www.tpub.com/content/engineering/14070/css/14070_302.htm. This is a military engineering website that contains a concise and clear description of the various forms of liquid asphalt. We found a number of other websites with helpful descriptions, such as www.asphaltinstitute.com, but we believe the military engineering website was the most useful.

I hope this information is helpful. Please contact me at 703-603-717 if you have additional questions.

Sincerely,

Mark Barolo, Acting Director Policy and Standards Division

Office of Underground Storage Tanks

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